

**REMARKS/ARGUMENTS**

Reconsideration of the above-identified application as amended is requested.

Claims 11-21 are pending in the instant application. Original claims 1-10 have been cancelled. Support for new claims 11-21 can be found in the original claims and pages 60-97 of the application as filed. Additional support for these amendments can be found throughout the remainder of the specification. No new matter has been introduced by the instant claim amendments.

Claims 1-10 stand rejected under 35 U.S.C. §112, second paragraph, as allegedly being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

New claims 11-21 are fully compliant with the requirements of §112, second paragraph. Thus, these grounds of rejection are now moot.

Claims 1-10 stand rejected under 35 U.S.C. §112, first paragraph, allegedly because the specification, while being enabling for making salts of the claimed compounds, does not reasonably provide enablement for making ester or prodrug of the claimed compounds.

Reference to ester or prodrug have been cancelled from the newly filed claims. As such this ground of rejection is now moot.

Claims 7, 8 and 10 stand rejected under 35 U.S.C. §112, first paragraph, allegedly because the specification, while being enabling for treating osteoarthritis and rheumatoid arthritis, does not reasonably provide enablement for treating and preventing various disease and medical conditions in which cathepsin K is implicated as embraced in the claim language.

The rejection is traversed.

Applicants appreciate the indication that methods of treating osteoarthritis and rheumatoid arthritis are enabled by the specification.

New claim 21 provides methods of treating a patient suffering from or susceptible to a disease or medical condition in which cathepsin K is implicated selected from the group consisting of osteoarthritis, rheumatoid arthritis and osteoporosis.

Applicants assert that the treatment of osteoporosis is also fully enabled based on evidence presented in the specification. See, for example the passage bridging pages 20-21 of the specification as filed.

Thus, claim 21 is fully compliant with the enablement requirement of §112, first paragraph.

Claims 5, 8, 10 stand rejected under 35 U.S.C. §101.

Each of these claims has been cancelled. Thus, the rejection is now moot.

Claims 1-5 stand rejected under 35 U.S.C. §102(b) as being allegedly anticipated by Caravatti (Bioorg. Med. Chem. Lett., 9 (1999) 1973-1078).

The Office points to compound 10 on page 1976 as the ground for rejection.

Applicants note that compound 10 is 4-amino-2-cyano-pyrimidine, which is used as a synthetic intermediate in the synthesis of a 2-thiazol-2-yl-pyrimidine compound.

R8' in claim 11 is an optionally substituted aryl-lower alkyl, e.g., R8' cannot be hydrogen. Thus, the instantly claimed compounds do not include 4-amino substituted pyrimidines.

Claims 11 is therefore patentable over Caravatti. Each of claims 12-21 depend from claim 11 and are therefore also patentable over Caravatti.

Claims 1-5 stand rejected under 35 U.S.C. §102(e) as being allegedly anticipated by Katoh (WO2003/016266 and the CAPlus abstract thereof)

Applicants note that the compound of Katoh is a 4-dimethylamino-2-cyano-pyrimidine. The CAPlus print out identifies this compound as a reactant or reagent.

R8' in claim 11 is an optionally substituted aryl-lower alkyl, e.g., R8' cannot be methyl. Thus, the instantly claimed compounds do not include 4-dimethylamino substituted pyrimidines.

Claims 11 is therefore patentable over Katoh. Each of claims 12-21 depend from claim 11 and are therefore also patentable over Katoh.

Early consideration of the application is earnestly solicited.

If for any reason a fee is required, a fee paid is inadequate or credit is owed for any excess fee paid, the Patent Office is hereby authorized and requested to charge Deposit Account No. 19-0134.

If the Examiner believes that a telephone conference would be of value, she is requested to call the undersigned counsel at the number listed below.

Respectfully submitted,



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